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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/213,984	12/17/1998	WILHELMUS J.M. DIEPSTRATEN	DIEPSTRATEN-	6137

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HITT GAINES & BOISBRUN P.C.
P.O. BOX 832570
RICHARDSON, TX 75083

EXAMINER

DONAGHUE, LARRY D

ART UNIT PAPER NUMBER

2154

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/213,984

Applicant(s)

Examiner

Group Art Unit

2154

--The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address--

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on Paper No. 15
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-22 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-22 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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1. Claims 1-22 are presented for examination.
2. The rejection is maintained and set forth below.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Vaitzblit et al. (5,528,513).

5. Vaitzblit et al. taught the invention (claims 1, 4 and 8, 11) as claimed including a an event recorder and event acknowledger (col. 4, lines 48-60); foreground controller (figure 1, 158) for activating the task according to priority (see abstract) and in response to events (see abstract, particularly lines 8-9, invoked by timer interrupt for each task is an event), and a background controller operating in a cyclical manner (col. 5, lines 15-17 and Figure 1, 100).

6. As to claims 2 and 9, Vaitzblit et al. taught masking (col. 4, lines 43-60).

7. As to claims 3 and 10, Vaitzblit et al. taught storing the events therefore the reference taught at least a Flip-Flop (col. 3, line 55- col. 4, line 67).

8. Claims 5, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513) as applied to claims 1, 8, and above, and further in view of Dummermuth et al. (6,009,454).

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It would have been obvious to one of ordinary to replace the time slice scheduling of Vaitzblit et al. with the instruction count as expressly suggested by Dummermuth et al. (Col. 3, lines 22-23).

9. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513) as applied to claims 1 and 8 above, and further in view of Seibert et al. (5,239,652).

Vaitzblit et al. failed to disclose placing the processor in an idle state. Seibert et al. taught place a processor in idle state in response to inactivity. It would have been obvious to combine the teachings to allow for the reduction of power consumption.

10. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. as applied to a claims 1 and 8 above, and further in view of McLain et al. (6,256,659).

As to claims , It would have been obvious to one of ordinary to include the teaching of vectoring as suggested by McLain, Jr. et al. (Col. 12, lines 63-67), to gain the benefit of allowing the process to resume at a later time where it was interrupted.

11. Claims 15-18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. as applied to claims 1- 4 and 8-11 above, and further in view of Motomura (5,713,038).

Vaitzblit et al. taught the substantially invention (claims 15 and 18) as claimed including a an event recorder and event acknowledger (col. 4, lines 48-60); a foreground controller (figure 1,

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158) for activating the task according to priority (see abstract) and in response to events (see abstract, particularly lines 8-9, invoked by timer interrupt for each task is an event), and a background controller operating in a cyclical manner (col. 5, lines 15-17 and Figure 1, 100).

Vaitzblit et al. did not teach a plurality of register sets and the interconnection of the plurality of register sets with the execution core. Motomura taught the use of a plurality of register sets and the interconnection of the plurality of register sets with the execution core. It would have been obvious to one of ordinary skill in the data processing art to modify the teaching of Vaitzblit et al. with that of Motomura to realize high speed and more flexible context switching, in a conventional processor.

12. As to claim 22, It would have obvious to one of ordinary skill in the data processing art to included the teaching of Vaitzblit et al. and Motomura, to gain the benefit of the hierarchical scheduling technique and to realize high speed and more flexible context switching, in an general-purpose computer.

13. As to claims 16, Vaitzblit et al. taught masking (col. 4, lines 43-60).

14. As to claim 17, Vaitzblit et al. taught storing the events therefore the reference taught at least a Flip-Flop (col. 3, line 55- col. 4, line 67).

15. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513) in view of Motomura (5,713,038) as applied to claim 15 above, and further in view of Dummermuth et al. (6,009,454).

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It would have been obvious to one of ordinary to replace the time slice scheduling of Vaitzblit et al. with the instruction count as expressly suggested by Dummermuth et al. (Col. 3, lines 22-23).

16. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513), Dummermuth et al. (6,009,454) and Motomura (5,713,038) as applied to claim 15 above, and further in view of Seibert et al. (5,239,652).

The combined teachings failed to disclose placing the processor in an idle state. Seibert et al. taught place a processor in idle state in response to inactivity. It would have been obvious to combine the teachings to allow for the reduction of power consumption.

17. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. and Motomura as applied to a claim 15 above, and further in view of McLain et al. (6,256,659).

As to claim 21, It would have been obvious to one of ordinary to include the teaching of vectoring as suggested by McLain, Jr. et al. (Col. 12, lines 63-67), to gain the benefit of allowing the process to resume at a later time where it was interrupted.

18. Applicant's arguments filed 4/28/03 have been fully considered but they are not persuasive.

19. Applicant argues that Vaitzblit et al. failed to teach acknowledging ones of said events which are relevant to the currently-active task. Applicant notes that "relevant" means having a significant and demonstrable bearing on a matter at hand.

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20. Examiner disagrees as the task is scheduled on the basis of priority, the relative criticality of the task. The decision to allow a task to proceed or to be inhibited has a significant and demonstrable bearing on the completion of that task.

21. The remaining arguments are based on the same element being missing .

22. See paragraph 20, for response.

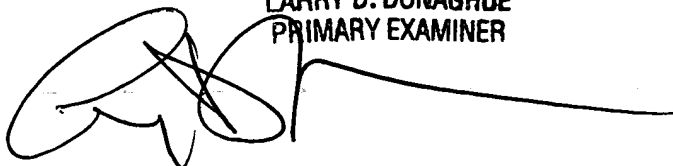
23. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C 133.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to L. Donaghue whose telephone number is (703) 305-9675. The examiner can normally be reached on M-F from 8:00 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An , can be reached on (703) 305-9678. The fax phone number for an official fax is (703) 746-7238, an after-final fax is 703-746-7238 and a draft or non-official fax is 703-746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

LARRY D. DONAGHUE
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to be 'L. Donaghue', with a long horizontal line extending to the right.